### STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION



JOHN ELIAS BALDACCI

DAWN R. GALLAGHER

COMMISSIONER

September 27, 2005

Dorothy Egg Farm

Attn: Francis Lough, President

Turkey Lane P.O. Box 298

Winthrop, Maine 04364

RE:

Permit Complicance System (PCS) Tracking Number # MEU508103

Maine Waste Discharge License (WDL) Application # W008103-5P-B-R

**Final License** 

Dear Mr. Lough:

Enclosed please find a copy of your **final** MEDPES permit/Maine WDL which was approved by the Department of Environmental Protection. Please read the permit and its attached conditions carefully. You must follow the conditions in the order to satisfy the requirements of law. Any discharge not receiving adequate treatment is in violation of State Law and is subject to enforcement action.

Any interested person aggrieved by a Department determination made pursuant to applicable regulations, may appeal the decision following the procedures described in the attached DEP FACT SHEET entitled "Appealing a Commissioner's Licensing Decision."

We would like to make you aware of the fact that your monthly Discharge Monitoring Reports (DMR) may not reflect the revisions in this licensing action for several months however, you are required to report applicable test results for parameters required by this licensing action that do not appear on the DMR. Please see the attached April 2003 O&M Newsletter article regarding this matter.

If you have any questions regarding this matter, please feel free to call me at 287-7658.

Sincerely

David Silver

Division of Water Resource Regulation Bureau of Land and Water Quality

Enc.

Beth Dehaas, DEP/CMRO; Dave Webster, USEPA; Bob Gerber, Stratex, 100 Middle St, Portland, ME04104 Bob Johnson, Walden Inc, POBox 6144, China Village 04926

WDS:W008103

web site: www.state.me.us/dep



# STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

### DEPARTMENT ORDER

### IN THE MATTER OF

DOROTHY EGG FAR	M, LLC	)	PROTECTION AND IMPROVEMENT
WINTHROP, KENNEI	BEC COUNTY, MAINE	)	OF WATERS
PUBLICLY OWNED 7	REATMENT WORKS	)	
SUBSURFACE WAST	EWATER DISPOSAL	)	WASTE DISCHARGE LICENSE
MEU508103		)	· · · · · · · · · · · · · · · · · · ·
#W008103-5P-B-R	APPROVAL	)	RENEWAL

Pursuant to the provisions of 38 M.R.S.A Section 414-A et seq., and applicable regulations, the Department of Environmental Protection (Department) has considered the application of the DOROTHY EGG FARM, LLC, with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

### APPLICATION SUMMARY

The applicant has applied for a renewal of Waste Discharge License (WDL) #W008103-5P-A-N, which was issued on July 14, 2000 and is scheduled to expire on July 14, 2005. The previous WDL authorized the discharge of 3,000 gallons per day (gpd) of treated egg washing and sanitary wastewater from an egg packing plant to the groundwater, Class GW-A, via a subsurface waste water disposal system in Winthrop, Maine.

### LICENSE SUMMARY

The facility has been assigned number MEU508103 for license compliance tracking purposes.

This license is similar to the previous license in that it is carrying forward the limitations and monitoring requirements currently in effect for the operation of the system along with operational constraints that are consistent with similar facilities licensed by the Department. This license also requires the submittal of an Annual Subsurface System Performance Report to the Department on or before January 31<sup>st</sup> of each calendar year. This license is different from the previous license in that it is eliminating the requirement to sample and monitor (1) for Total Phosphorus and TKN in the on-site monitoring wells, and (2) surface water quality at the Hoyt Brook sampling stations. This license also establishes numeric effluent limits for Biochemical Oxygen Demand and Total Suspended Solids consistent with similar subsurface wastewater disposal systems.

# SPECIAL CONDITIONS

# A. LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning the effective date of the license and lasting through the license expiration date, the licensee is authorized to operate a sequence batch reactor (SBR) and sub-surface waste water treatment disposal system. The treatment system (OUTFALL #002B) (1) shall be limited and monitored as specified below.

Effluent Parameter	Monthly Average	Daily	Minimum	Sample
		Maximum	Measurement	Type
Flow [78886]	3,000 Gallons [07]	Report, Gallons [07]	Daily [01/01]	Measure (MS)
BOD [00310]	100 mg/L (19)	· Report, mg/L [19]	Monthly 101/301	Grab (GR)
TSS [00530]	100 mg/L [19]	Report, mg/L [19]	Monthly 101/301	Grab IGRI
Nitrate (100620)	Report, mg/L [19]	Report, mg/L [19]	Monthly 101/301	Grab IGRI
Nitrite [00615]	Report, mg/L [19]	Report, mg/L [19]	Monthly (01/30)	Grab IGRI
Ammonia-N [00610]	Report, mg/L [19]	Report, mg/L [19]	Monthly [01/30]	Grab (GR)
TKN [00625]	Report, mg/L [19]	Report, mg/L (19)	Monthly 101/301	Grab IGRI
Total-N [00600]	Report, mg/L [19]	Report, mg/L [19]	Monthly [01/30]	Grab (GR)
pH (Standard Units) [00400]	6.0—9.0 [12]	0 [12]	Monthly [01/30]	Grab (GR)

The bracketed italicized numeric values in the table above are code numbers that the Department personnel utilize to code the monthly Discharge Monitoring Reports.

Footnotes: See page 6 of this License. pH shall be between 6.0 and 9.0 S.U. at all times. Daily flows do not need to be measured when the egg processing facility is not being operated. The Monthly Average flow shall not include days when the facility is not being operated. Note: Total Flow (effluent parameter) includes egg processing waste water quantity from the SBR and sanitary wastewater from employees and visitors to the facility and shall be reported on the DMR sheet.

### SPECIAL CONDITIONS

### A. LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

Footnotes - [Special Condition A(1), & A(2)]

### Treatment System Effluent

1. The combined (SBR and sanitary) effluent shall be sampled (sampling location is the sampling port on the effluent pipe leading from the 3,000 gallon septic tank on the north side of the egg processing plant) and shall be representative of what is actually discharged to the subsurface waste water disposal system. Any change in sampling location must be approved by the Department in writing. Sampling and analysis must be conducted in accordance with; (a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, (b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or (c) as otherwise specified by the Department.

### **Groundwater Monitoring**

- 2. Measured to the nearest one-tenth (1/10<sup>th</sup>) of a foot as referenced from the surface of the ground at the base of the monitoring well.
- 3. Groundwater sampling shall be conducted during each calendar quarter during each calendar year. Sampling, handling and preservation shall be conducted in accordance with federally approved methods (see footnote #1). Specific conductance (calibrated to 25.0° C), pH and temperature are considered to be "field" parameters and are generally to be measured in the field via instrumentation (please see Fact Sheet page). The licensee is required to test for these parameters whether wastewater was disposed of via the subsurface disposal system or not. Consistent rising trends in Specific Conductance or sudden spikes from previous levels shall be reported immediately to the Department, and may necessitate the need for additional ground water testing requirements.

### B. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and postmarked on or before the thirteenth (13<sup>th</sup>) day of the month or hand-delivered to the Department's Regional Office such that the DMR's are received by the Department on or before the fifteenth (15<sup>th</sup>) day of the month following the completed reporting period. A signed copy of the DMR and all other reports required herein shall be submitted to the following address:

Bureau of Land and Water Quality
Department of Environmental Protection
State House Station #17
Augusta, Maine 04333

# SPECIAL CONDITIONS G. GENERAL OPERATIONAL CONSTRAINTS

- 1. The licensee shall operate the system consistent with the requirements of the *Maine Subsurface Wastewater Disposal Rules* (144A CMR 241 authorized under Title 22 MRSA §42) and other pertinent regulations, as well as the limitations of the design.
- 2. All upgrades, replacements or authorized expansions of the treatment systems shall be in accordance with *Maine Subsurface Wastewater Disposal Rules* and be approved by the Department.
- 3. The licensee shall maintain a file on the location of all system components and relevant features. Each component shall be mapped and field-located sufficiently to allow adequate inspections and monitoring by both the licensee and the Department. Septic tanks and distribution box covers shall be accessible for inspections and pumping. Risers shall be installed as necessary. See Special Condition K of the license.
- 4. All system components including collection pipes, tanks, distribution boxes, pumps, pumping stations, disposal fields, and manholes shall be identified and referenced by a unique system identifier in all logs and reports.

### H. OPERATIONAL REQUIREMENTS

It shall be the responsibility of the licensee to ensure that:

- Occurrences of excessive inflow and infiltration are corrected immediately. Ponding of surface water over the disposal field does not occur and all sources of surface water are diverted away from the fields.
- 2. Driving or parking over any part of the system is prohibited, except in cases where weight-bearing components (H-20) have been installed and approved for use in the design. Covering the disposal field with a hard surface such as concrete or asphalt is prohibited. The field is kept free of woody vegetation and the digging or planting of anything other than grass or other similar herbaceous plants is prohibited.
- 3. Stockpiling of snow or soil on the disposal fields or soil excavation/stockpiling within 300 feet of the system or monitoring wells is prohibited.

### I. SEPTIC TANKS

- 1. All septic tanks shall be watertight and tanks must be constructed of materials approved by the Department and in accordance with the *Maine Subsurface Wastewater Disposal Rules*. Metal septic tanks are prohibited.
- 2. Inlet and outlet connections of each septic tank or compartment shall be designed to obtain effective retention of scum and sludge. All connections and baffles shall be fastened with and constructed of, or coated with, materials that are resistant to corrosion.
- 3. Septic tanks and other treatment tanks shall be regularly inspected (as specified in Special Condition J) and maintained to ensure that they are providing best practicable treatment. Tank contents shall be removed whenever the sludge and scum occupies one-third of the tank's liquid capacity or whenever levels approach maximum design capacity, whichever is less.

### SPECIAL CONDITIONS

### M. SUBMITTAL OF ANNUAL SUBSURFACE SYSTEM PERFORMANCE REPORT

By January 31<sup>st</sup> of each calendar year \*\* the licensee shall submit to the Department for review and approval an annual report of the treatment system's performance covering the previous calendar year (January 1 to December 31). The annual report shall include any standard reporting form(s) developed by the Department. (PCS codes 90199, 90299, 90399, 90499, 90599).

The annual report shall include, but is not necessarily limited to, the following:

- 1. A copy of the pump log for that year, including the date(s) the system was pumped, gallons pumped, tank condition (for the equalization tank, SBR, sludge storage tank, and distribution tank).
- 2. A copy of the Inspection/Repair Log for that year including the date(s) of inspections, repairs, replacement or upgrade of any part of the system, including the date work was performed, description of the work, type of inspection, repair or upgrade, parts replaced or added, inspection results, and the contractor or person performing the work. Repairs/replacement included on the log shall include leach field bed inspections, tank inspections, additions or replacement of major system components such as pumps, piping, controllers, tanks, leach fields, etc.
- 3. Flow Report submittal of graphical depiction of the total flow for each month compared with the design of the system. Total flows for the current year compared with the previous five (5) years beginning in 2005.
- 4. Operations Summary overall summary of the names of operators, operators Waste Water Treatment Plant Grade level and status, system performance, proposed corrective actions and schedule for planned improvements, major changes to plant operation in the previous year and planned for the next year and planned repairs/upgrades for the following year. Describe any unlicensed discharges that occurred during the previous year and actions taken to clean up these discharges and prevent future discharges. The report shall be signed and dated by the certified treatment system operator in responsible charge for the system.

<sup>\*\*</sup> The Department will prompt the licensee and the facility inspector in the comment section of a Discharge Monitoring Report (DMR) issued in December of each calendar year that the Annual Subsurface Performance Report is due January 31st. (This note to be added to the comment section of a DMR issued in December)

### MAINE WASTE DISCHARGE LICENSE

### **FACT SHEET**

Date: July 11, 2005

COMPLIANCE TRACKING NUMBER: MEU508103

LICENSE NUMBER: W008103-5P-B-R

NAME AND MAILING ADDRESS OF APPLICANT:

Dorothy Egg Farm
Attn: Francis Lough, President
P.O. Box 298
Winthrop, ME 04364

**COUNTY: Kennebec County** 

NAME AND ADDRESS OF FACILITY:

Dorothy Egg Farm Turkey Lane Winthrop, ME 04364

RECEIVING WATER/ CLASSIFICATION:

Groundwater/Class GW-A

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

Robert Johnson 207-968-3302

### 1. APPLICATION SUMMARY:

Application: The applicant has applied for a renewal of Waste Discharge License (WDL) #W008103-5P-A-N, which was issued on July 14, 2000 and is scheduled to expire on July 14, 2005. The previous WDL authorized the discharge of 3,000 gallons per day (gpd) of treated egg washing and sanitary wastewater from an egg packing plant to the groundwater, Class GW-A, in Winthrop, Maine.

a. <u>History</u>: Recent Department licensing actions include the following:

July 14, 2000

- The Department issued WDL #W008103-5P-A-N that authorized Dorothy Egg Farm to operate a subsurface waste water disposal system to treat and dispose of 3,000 gallons per day of sanitary and egg processing waste water in the Town of Winthrop.

June 10, 2005

- Dorothy Egg Farm submitted an application to the Department to renew WDL #W008103-5P-A-N. The application was accepted for processing on that date.

### 4. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The license establishes a monthly average limitation of 3,000 gallons per day based on information provided by the licensee as representative of normal flow. The operator of the system shall monitor the effluent discharge to the leach field area in order to verify adequate infiltration of the waste into the soil and the discharges must be suspended if surface ponding or failure of the leach field system occurs.

Biochemical Oxygen Demand (BOD<sub>5</sub>). Monitoring for BOD yields an indication the condition of the wastewater being applied, of excessive loading of organic material and the effectiveness of the wastewater treatment process.

Nitrate-nitrogen, Nitrite-Nitrogen, Ammonia-Nitrogen, and Total Kjeldahl Nitrogen (TKN). Nitrogen compounds are by-products of the biological breakdown of ammonia and are inherent in domestic like sanitary wastewater. Because nitrate-nitrogen is weakly absorbed by soil, it functions as a reliable indicator of contamination from waste-disposal sites. Elevated levels of nitrate-nitrogen in the drinking water supply are of human health concern. Each compound is evaluated to determine the overall conversion ratio and in determining the fate and transport of the pollutant. The Nitrate-N limit of 10 mg/L is a National Primary Drinking Water standard. This permitting action carries forward the existing report requirement for these compounds.

Specific Conductance, Temperature and PH are considered to be "field" parameters meaning that they are measured directly in the field via instrumentation and does not require laboratory analysis. They are considered surveillance-level monitoring parameters that are used as early-warning indicators of potential groundwater contamination.

Total Suspended Solids (TSS). TSS in the groundwater yields an indication of the integrity of the monitoring wells. Evaluation of TSS in effluent is an indication of the efficiency of the treatment process.

### 5. MAINTAIN ADEQUATE BUFFERS AND LAND FOR REPLACEMENT

The licensee is expected to provide adequate buffers from other land uses, and retain, where possible, land for system expansion or replacement.

### 6. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

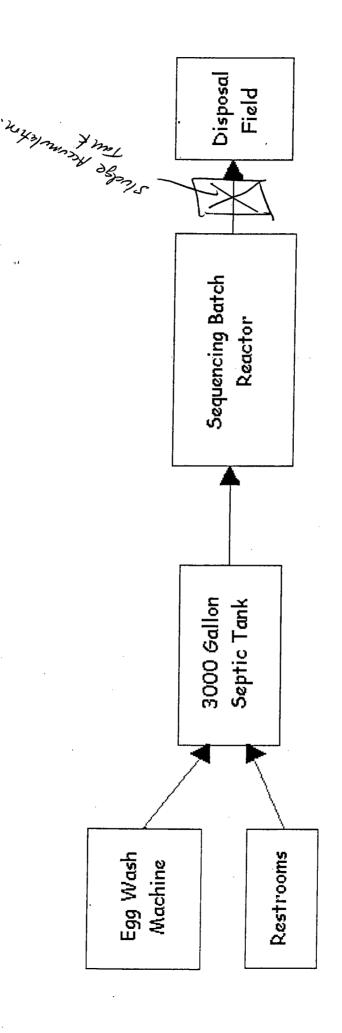
As licensed, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the water body to meet standards for Class GW-A classification.

### 7. PUBLIC COMMENTS

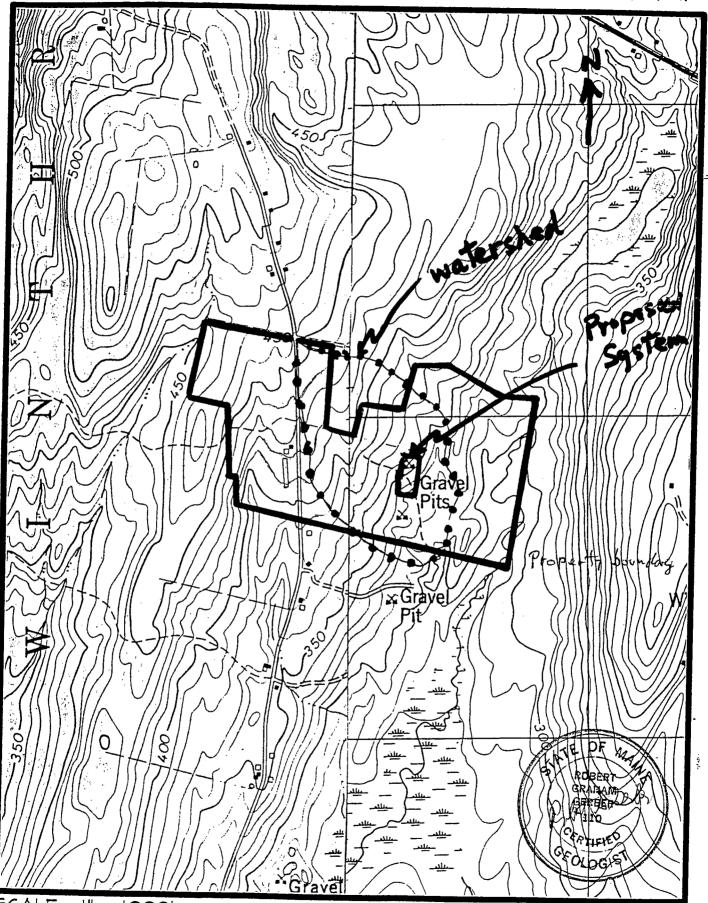
Public notice of this application was made in the Kennebec Journal newspaper on or about June 10, 2005. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft licenses shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

Dorothy Egg Farms – Subsurface Wastewater Disposal Schematic Flow Diagram

December 30, 1999



## U.S.G.S. CONTOUR MAP



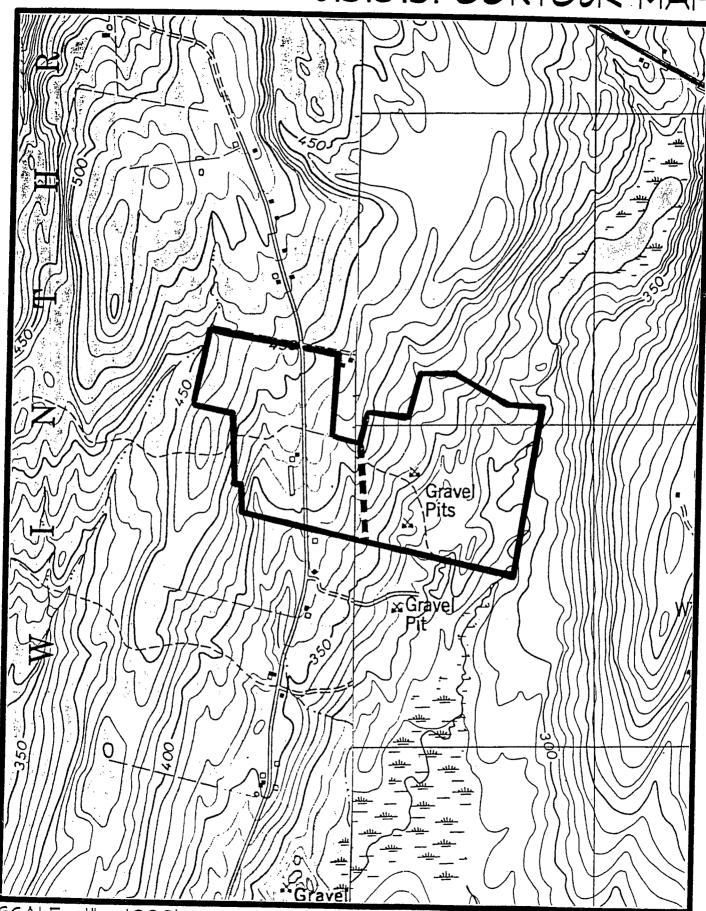
SCALE : 1" = 1000'

SOURCE : WINTHROP & WAYNE QUADRANGLES

(7.5 MINUTE)



# U.S.G.S. CONTOUR MAP



SCALE : |" = 1000'

SOURCE : WINTHROP & WAYNE QUADRANGLES

(7.5 MINUTE)

